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BY THOMAS EMMERSON, AT $1 PER ANNUM IN ADVANCE—OR $1 50 AT THE END OF THE YEAR

THE SILK CULTURE.

The importance of the subject to which it relates, the time required for making the necessary preparations, in rearing the mulberry, building the houses, and acquiring dexterity in all the various operations connected with the manufacture—the demonstrations of the practicability of success afforded by the actual experiments which have been made in Connecticut and other parts of the United States—and the vast benefits which would result to Tennessee from the extensive and successful culture of silk, will, we trust, be deemed a sufficient apology for occupying so large a portion of the present number with the subjoined article from that valuable paper the American Farmer and Gardener.

It will be seen by the letter of Judge Spencer of New York, one of the most talented men in the nation, that the subject has attracted the attention of our most enlightened and patriotic citizens, and that they are animated by a zeal for the extension of the silk culture which nothing short of a firm conviction of its great importance to the prosperity of the country could have excited.—We do trust, that at least the enterprising and wealthy farmers of Tennessee will without delay commence experiments, if only on a small scale, by which the value of the silk culture amongst us can be satisfactorily tested. Should it succeed to the extent which we confidently anticipate, those, who by their enterprise and public spirit, shall be the instruments of bringing it into general and extensive operation, will earn for themselves the proud title of the benefactors of their country—besides, that they will have greatly promoted their own individual pecuniary interest.

ED. T. FAR.

From the Farmer and Gardener.

SILK CULTURE.

The following remarks, on the culture of silk, and the propriety of introducing it into the Alms-house of Baltimore city and county, is most respectfully addressed to the favorable consideration of the Mayor and city council of Baltimore, the commissioners of Baltimore county, and the trustees for the Poor of said city and county by the Editor of the Farmer and Gardener, in the fond hope, that the suggestions thrown out may serve to bring into notice a branch of industry of incalculable value to the nation, and which, he also believes, if adopted and prosecuted with intelligence and energy at the Alms-house, would in a few years relieve the city and county from the entire burthen of the cost of its support.

We insert, in the present number a very interesting and useful letter of Judge Spencer, of New York, on the subject of the cultivation of silk in this country. The facts to which he refers are both important and encouraging to such as have the means and disposition of entering into it. He estimates the net profits of twenty acres set in an orchard of mulberry at from $5,000 to $5,000 per annum. This, to those who have not particularly investigated the subject, may seem an exaggerated, if not startling sum. To us, however, it appears to be greatly under the amount which may, by judicious management, be realised from an orchard of twenty acres thus planted.

We are pleased with his suggestion, of adopting the culture of silk in Alms-houses, and have been, for several months, contemplating submitting a proposition to that effect to the trustees of the Alms-house of Baltimore city and county: having cursorily mentioned the subject to a gentleman recently a trustee, without entering into any particulars, early last fall; remarking—that we thought we had a plan in our mind, the which, when matured, we would submit to his consideration—a plan, by which, we thought, we would be able in a very few years, to make that establishment support itself. As our incessant occupation, has not hitherto afforded us the leisure to carry out our intentions, as then intimated, we will seize this, the first occasion which has presented itself, of so doing. It will now answer the two-fold purpose, of showing the practicability, we hope, of our views as then expressed, sanguine as they were, and of encouraging planters and farmers generally, throughout the country, (though it may fail of the other object, to turn their thoughts seriously to a proper consideration of the advantages and disadvantages which are likely to result from the proposed culture of the mulberry, management of the silk worm, and fabrication of silk. This is all we desire of them, being fully convinced that a dispassionate examination, must inevitably lead to such convictions of utility as cannot fail to raise up zealous friends in all directions.

From the facts stated by Judge Spencer, it appears, that silk worms have been raised in Windham county, Connecticut, ever since 1760, a period of seventy-five years; that during the last year, in the town of Mansfield, in the same state,

there were produced $60,000 worth of silk; and that in Windham county, also in the same state, $500,000 worth were mults during the same period.—These resade are truly flattering, and show most conclusively, what is within the power of American industry and skill to accomplish, when guided by well directed enterprise.

The amount of silks imported into our country last year, was $10,000,000, and the demand must be increased with its annual growth in population and resources. Hence then, every inducement which a perfectly practicable plan of entering into a new and lucrative branch of industry, a ready sale, and, an increasing demand, to almost an unlimited extent, can offer, is presented to urge our agriculturists to its adoption. Having premised this much, we will proceed to discuss the subject of profit, believing *that* to be the only debateable question involved, inasmuch as by experience, it is proved beyond all dispute, that silk may be produced in the United States, to as great advantage as in any part of the world—and taking the opinion of a gentleman, whose opportunities of judging entitle it to consideration, as our guide—of a quality equal, if not superior to any raised in Europe.

We before remarked, that we were pleased with Judge Spencer's suggestion, of introducing the culture of silk into Almshouse establishments, and we will here observe, that in addition to the great relief which such a step would be, in a pecuniary point of view, to the inhabitants burthened with the tax of each poor house, the example which would be thus set, would tend to stimulate individuals to enter into the business, so that in a few years, the article of silk, instead of being an annual *tax upon our people of ten millions*, and upwards, would form an important item in our *exports*, thereby adding to individual wealth, and augmenting the field of national resources.

With a view of demonstrating the feasibility of the plan to which we have before alluded, for defraying the expense of the Alms-house of Baltimore city and county, we shall enter into a course of calculations, from whose results the reader will be able to judge, whether our opinion is sustained by the data upon which it has been formed, or not. These calculations will enable those interested, to apply them as circumstances may require, and though local in their present application, will avail as well for one part of the country as another, or for individuals, as well as for corporate bodies. In what we may say on this subject, we claim no credit on the score of originality, we have no experience of our own, the facts and opinions advanced, being derived from the writings of others—and from none have we drawn more freely than from those of Mr. Daniel Bradley, of the state of New York, Dr. Mease, of Philadelphia, Mr. Gideon B. Smith of this city, and Mr. Elias Frost, of Plainfield, Massachusetts—gentlemen who have all devoted many years to the study of this branch of industry, whose experience in the culture of the silk worm, and whose active, discriminating minds and patient research, eminently qualify them for the purposes of instruction.

Mr. Frost, from an experiment which he details in a very interesting letter dated August 27, 1833, has proved that 1243 cocoons yielded 7 3-4 ounces of reeled silk, being equal to rather better than 18 1-2 ounces to 3000 worms, or one pound to a fraction less than 2527 worms.

Mr. Bradley gives it as his opinion, that, at a moderate calculation 3000 worms will make a pound of reeled silk.

The cocoons of Mr. Frost (1243) weighed 4lbs. 5oz. in the aggregate, and 20 of them weighed 1oz.; these last we presume, were picked, as that is above the average weight. The worms as fed by Mr. F. consumed on an average 5lbs. of leaves to each 100, during their feeding. This consumption of leaves corresponds, according to the account of Dr. Mease, with singular exactness with the experience of the Pavarian silk culturists, where 20,000 worms devour, during the feeding season, 1000 lbs. of leaves, being precisely 5lbs. to each hundred; we are thus able to calculate to a certainty the requisite quantity of leaves to sustain any given number of worms.

It is thus demonstrated by the actual experiment of Mr. Frost, that 3000 worms are able to make upwards of 18 1-2 ounces of silk, which would be a difference of rather better than 12 1-2 per cent in favor of the culturist over the computation of Mr Bradley: but as in calculations of this cha-

acter, we would always prefer to be under rather than over attainable results, we shall adopt the opinion of Mr. B. as the basis of our calculation. He as we have before shewn, affirms with confidence, that at a moderate and safe calculation, 3000 worms will produce a pound of reeled silk.

Mr. Smith informs us that a full grown mulberry tree (the white mulberry, we presume) will produce foliage enough to feed 5,000 worms, but that in order to provide against failures and loss of leaves, and to save the trees from excessive cropping, it is better to have double the number of trees and in a matter of this kind his opinion is entitled to great weight; and therefore, in the calculation we shall make we shall not fail to provide against the contingencies of which he speaks.

Having thus stated the consumption of *food* and probable *produce* of the worms, we will proceed to our remarks. If the trees to be selected should be the white mulberry, they could either be planted in square rows or in hedges, as might best suit the fancy or taste of the party, or the dimensions of the ground, and would probably answer as well in the latter way, and yield as much provender, as in the former. Of this we will not pretend to speak with certainty, deeming it at present an unimportant consideration. Mr. Bradley thinks that 3,000 trees might be arranged in hedges and otherwise, on a single acre of ground but if it be desired that the white mulberry should attain its full size and maintain vigor and freshness of foliage, twenty feet apart would be a proper distance; and if at this distance, an acre would hold 108 trees, and would have this advantage; that the orchard could be, with decided benefit to the trees, subjected to other culture. If this distance should be thought too great it might be reduced to 6 feet, which would be space enough until the trees should arrive at maturity, when if thought advisable, they might be alternately thinned out. At six feet, however, we believe the ground would be lost to other culture. As to this we are not particular, and shall leave it to the persons interested to decide for themselves. Should the plant selected be the *Morus Multicaulis*, the space might be still more reduced, say to four feet, or less, indeed one way; but where ground is not an object, we should prefer room for free circulation of light and air, and a vigorous stretching forth of limbs. In order, however, to have some specific data whereon to ground our subsequent calculations, we propose that the authorities of Baltimore city and county should appropriate 40 acres of their farm to a mulberry orchard, which at 1 tree for every 20 square feet, would give them 108 trees to the acre, or 4,320 trees to the 40 acres, as:

108
40

4320 trees on 40 acres.

Now it is stated by Mr. Smith, that one full grown tree will furnish food for 5,000 worms, so that the trees on the entire orchard will feed 21,600,000 worms, as:

4320
5000

21,600,000 worms to be fed on 40 acres.*

* It is computed by Mr. D'Homergue, that each tree at 6 years of age will yield 30 lbs of leaves, so that, we think, in order to secure a certain supply of provender for the worms, at the earliest period, it would be best; in the first instance, to plant the trees at 6 feet square apart, which would give 1210 trees to the acre, and as before suggested, these could be thinned out as occasion might require. These 1210 trees to the acre would give us 48,400 trees on the 40 acres, which at 30lbs. of foliage to each tree, would yield 1,452,000lbs. of leaves, and as 75lbs. of leaves is competent to the support of 1500 worms, so would the total yield of leaves just quoted, sustain 29,040,000 worms, being an excess of supply for the 21,600,000 worms, as assumed by us, of nearly 40 per cent. an amount quite sufficient to provide against the contingencies as mentioned by Mr. S. It is also thus proved, that an acre of ground is capable of raising 726,000 worms.

In Mr. D'Homergues' statement, he assumes, 1. that there are 45,539 square feet in an acre, and 2. that 3000 trees at 6 feet square may be planted on an acre. In neither of which conclusions is he right. The English statute acre, which is the acre of our country, contains 160 square poles or perches; the statute length of a pole or perch is 5 1-2 yards or 16 1-2 feet. If we

These, at the ratio of yield as tested by the experiment of Mr. Frost, would produce a fraction over 8,417lbs of silk, as:

21,600,000
7½

151,200,000
10,800,000
5,400,000

16)

1243)167,400,000 (134,674 oz. silk.
1243

84,178 lbs. silk.

4310
3720

5810
4972

8380
7458

9220
8701

5190
4972

218

which at $4 per lb., the lowest price, would amount to $33,668.

But as we are disposed not to excite too sanguine expectations, we prefer to take the ratio of Mr. Bradley. He says as before stated that 3000 worms will make a pound of reeled silk, which will yield an aggregate of 7,200lbs. of silk for the forty acres of mulberry, or 21,600,000 worms, as:

3,(000) 21,600,(000

7,200 lbs. of silk.

The value of this silk bears a strict relation to the degree of skill with which it may be reeled, and Mr. Bradley justly observes, that it always may, by proper care and attention, be well reeled. He also says that if the silk be of first quality, from $7 to $10 per pound may be procured for it; by others, the value of it is set down at from $4 to $5 and $8 per pound. The value of the raw silk in this country, however, cannot be supposed to be settled, as the culture is but in its infancy, and purchasers, consequently, few in number. Let us however enter into the calculations:

7,200 lbs of silk at		$4	per lb, is	$28,800
7,200	do	5	"	36,000
7,200	do	7	"	50,400
7,200	do	8	"	57,600
7,200	do	10	"	72,000
If we take the average, which is $6,80 per lb. we have				48,960

It must then be admitted, if the data assumed be correct, that each acre of the land will yield $1224, at the average of the prices stated, or at the lowest estimated value, $720 to the acre.

Now then, let us compare the expense of supporting the poor of Baltimore city

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multiply 5 1-2 yards by itself to get its square, it makes 30 1-4. the number of square yards in a pole or perch. and this last number multiplied by 160, the number of perches in an acre, will give us 43,560 square feet in an acre: so then, the square of six being 36, that number becomes the divisor, which will go 1210 times in the number of square feet in an acre, as:

36) 43560 (1210
36

75
72

36
36

0

The French arpent or acre, is equal to 54,450 English square feet, and as the measure set down as assumed by Mr. D'Homergue, is neither that of England nor France, we incline to the belief that it is a misprint; but we are at a loss to conjecture how he could arrive at the conclusion, that 3,000 trees could be placed on an acre of ground 6 feet square apart. Whatever may be the required distance, its number must be multiplied into itself to furnish the divisor, which being divided into the number of square feet in an acre, the quotient will be the number of trees which can be placed thereon. The rule is a simple one, and if recollected, would be of great service to farmers, gardeners, and others, interested in transplanting trees or plants.

and county, for the year ending April 30, 1834, with the value of the silk at the minimum price.

City's part	$18,348 74½
County's part	4,500 00
	$22,848 74
Lowest estimated value of silk	28,800 00
Excess of silk culture, the lowest estimate being compared	$5,951 25½

Thus then, it appears that 40 acres set in mulberry properly cultivated, and the worms judiciously managed, will at the very lowest value which has been set upon silk, be more than sufficient, by nearly $6,000, to meet the gross expenditures, incident to the support of the poor of the establishment in question, and to leave a sum more than equivalent for interest on the outlay of land employed, fixtures, &c. For ourselves we do not see why the maximum price could not be realized for the silk raised there, as from the perfection to which *reels* have been brought in this country, nothing but the most culpable neg'ect—the most wanton carelessness—could possibly prevent the operation of reeling being well performed. And as the worms would require attention but about from five to six weeks in the year, we cannot perceive any good and sufficient reason, why some branch of silk manufacture should not be connected with the culture of it, so as to occupy the time of such of the inmates, the remainder of the year, as might not be otherwise engaged. For instance, by the conversion of the raw silk into yarn, and the manufacture of stockings, by means of the newly invented *knitting machine*, of which a description is given in this paper,—a machine which is said by the aid of a child to perform the work of *six expert knitters* in the old mode. The labor of the paupers could be thus turned to a profitable account, employment of a delicate and beautiful kind given them, and whenever the income of the establishment exceeded its expenditures to an amount worthy of consideration, it might be appropriated to meet the other charges upon the city and county, and thus relieve the citizens of the former of a portion of those onerous burthens which in the furtherance of the great objects of internal improvement, have, necessarily, been imposed upon them.

It has been stated by some writers, that an acre of ground could be so planted with mulberry trees—for instance, in hedges—as to make it yield foliage enough to feed a million of worms, and others have gone so far as to say two millions; but in calculations of the kind, it is always safest not to be too sanguine, and especially in the present instance, when the space of a few acres of ground is no object.

As to the labor, that is by no means an important consideration, as two persons are competent to attend to a million of worms for the first week, four for the next week, eight for the third, and from sixteen to twenty for the remainder of the time, which may be from ten days to two weeks, and there is but very little of the necessary labor to be performed, that cannot be done by boys and girls, women, and aged and decrepit people.

The ground occupied in the mulberry orchard, could, as we have before premised advantageously to the young trees, be occupied in the cultivation of potatoes, or some other roots, or in clover for three or four years, so that it would not cease to be profitable, even while thus maturing for its ultimate object; and, indeed, after the trees should have attained their growth, they would experience no injury, if not benefit, from a crop or two of clover being taken from the soil every three or four years, especially if during that time a generous carpet of that luxuriant grass were ploughed in.

It is stated that a room 40 by 80 feet, will accommodate a million of worms, and as nothing but the cheapest materials and work is requisite, a range of buildings two stories high, sufficiently spacious to accommodate all the worms to be fed from the foliage of the 40 acres of mulberry, together with all necessary fixtures, could be put up for less than five thousand dollars, which in fact, would be the chief outlay. This sum may be thought by some too small; but we wish it recollected that we are speaking of the necessary expenditures, and not of what might be expended, or sacrificed to taste. We once knew a gentleman who built a barn which cost him fourteen thousand dollars, whereas his neigbor put up one for a less number of hundreds, which answered all the valuable purposes of his

farm equally as well, as did the costly one those of his neighbor. In matters of the kind, *utility* and *not display* should be consulted. The cost of the reels are about 12 dollars a piece, so that they form but a small item in the outfit.

While we are thus submitting our plan to the official authorities alluded to, with a view of lessening the *general* burthens, we would fain say a word to the farmer who may be the owner of a small farm, and who after toiling from the beginning to the end of the year, finds himself barely able to keep the sheriff from the door—as also to the widow, surrounded by her orphans, who may be the proprietor of a few acres,—to these we would say,—if you desire to provide yourselves and offspring with the sure means of competency, lose no time in procuring a few mulberry trees, and *commence* the silk culture. If you cannot spare money enough to buy trees sufficient to set out an acre, try and procure as many as will set out a half—a quarter, or an eighth of an acre—*make a beginning*, and then continue your good work till you accomplish your acre of trees; when that is done you may each look upon yourself as enjoying that glorious state of independence which will enable you to live in comfort, rear and educate your children, and do justice to your neighbors. Think not that we are indulging in any other feeling than that of seriousness, when we declare to you that an acre of mulberry trees well cultivated will yield you more *clear profit* than all the rest of your respective farms, though they may each number two hundred acres, and that the necessary labor can be performed without *extra* expense, and without injuriously interfering with your attention to the other departments on your estates. Do not let the fear of the cost of a building deter you. You have each and all the materials of construction in your woods, and you and your hands, if you so will it, can in a few weeks, cut down and hew, or saw out, a sufficient number of uprights or posts, and weather boards, to make a house *good enough* for the purpose—that is all you should aim at.

In conclusion let us advise you, *to make a beginning*. An acre thus improved and well managed, would yield an amount of silk upon which you may realize an *annual income* of from $720 to $1,800, the precise amount being solely within your own power of regulation—being dependent on the care with which you may attend and feed the worms and perform the reeling, and the degree of value which you thus impart to the silk—so that, in fact the *measure of your reward* is perfectly within your own control.

CULTURE AND MANUFACTURE OF SILK.

ALBANY, April 7, 1835.

To Samuel M. Hopkins Esq,
Geneva, Ontario county.

From a long acquaintance, and, as I believe, a reciprocal esteem and friendship, I have thought that I could not better employ a leisure hour, than in addresssing you on a topic which I regard as of high importance to our fellow citizens. You will not suspect me of insincerity or flattery, when I assure you that I know no man to have more enlightened views, or more ardent patriotism than you. Hence the propriety of my selecting you as a correspondent on the interesting subject which I proceed to state.

Since 1830 my attention has been drawn to the consideration of the culture of silk in this country, and particularly in this State. I am perfectly satisfied that no agricultural pursuit will bear any comparison with the culture of silk as regards profit. I should not want a better income than the clear profits of an orchard of white mulberry trees, of twenty acres of ten years old. The clear nett profits of such an estate would not fall short of from $3000 to $5000 annually; and this profit would go on increasing with the growth of and the productiveness of the trees.

You have seen a communication made by me to the commissioners appointed by the Governor, to examine into the economy, government and discipline of the State prison, which has been published, not, however, extensively. It contains some matter irrelevant to the culture of silk, and omits some things interesting to those who may embark in the enterprise. You must have observed as a statist, that our annual import of silk amounts to the value of $10,000,000, and will increase with our wealth and population. This amount far exceeds the value of all our bread stuffs exported. This consideration ought to excite us to the inquiry, whether such a drain from the resources of the country cannot be prevented, a new source of

industry be opened, which shall in a short period supply our own wants, and enable us to become exporters of either raw silk or silk fabrics.

I consider it as a fact demonstrated, that our soil and climate is genial to the growth of the mulberry tree, and the culture of silk. Trees of this description are already growing and fluorishing in various parts of the State, and I presume that the portion of this State, from Skeneatales to Lake Erie, is peculiarly adapted to the mulberry, from the fact that the most delicate fruit trees come to great perfection within that region. Since 1760 the silk worm has been reared in Windham county, Connecticut, which is about the latitude of Albany.—The culture of silk has been successfully prosecuted in that county, and it has reached to a large amount. The following is an extract from the Daily Advertiser of the 15th instant: "*American Silk*—Raw silk, we learn from the Burlington Free Press, has been produced this year in Mansfield, Connecticut, to the amount of over $60,000. The county of Windham, Connecticut, produced 5 tons of silk annually, valued at $500,000. and if reeled would be worth double the sum," If this be true, and that it is substantially true I fully believe, the question is settled that the soil and climate of this State is genial to the culture of silk. It settles also another question that it is much the most profitable business that can be undertaken.

We have the testimony of Mr D'Homergue, a man born at Nismes, in France and brought up from infancy to the reeling and manufacture of silk, and who came to this country on the recommendation of the late James Brown, then Minister in Paris, who asserts in his essays that he was surprised to find the American Silk superior in quality, and the quantity yielded by the cocoons, to any he ever saw. But, my dear sir, could you have seen specimens of American silk exhibited in this city a few days since manufactured by Mr Gay, all doubt would be removed. These specimens were pronounced by the many who saw them to be equal, if not superior, to any silk which had ever been seen here.

Now, sir, what are the impediments to be overcome, in introducing the culture of silk extensively in this State? And here let me observe that there is no danger of overdoing the business; there will always be a demand in England for all we can raise beyond supplying our wants; where, from the humidity of the climate, or other causes, the silk is not reared.

It is necessary to devote a small space of good and fertile ground, as a nursery in which to sow the seeds. It is computed that one ounce of seed, properly sown, after the ground is thoroughly ploughed, or dug and harrowed, or raked and sown, in drills, at about three feet apart, will give about five thousand young trees. They require to be kept free from weeds, and injury from cattle. At two years of age they are generally fit for placing in an orchard at the distance of from seven to twelve feet, at right angles—and here the labor of man terminates. All the subsequent culture may be conducted by women and children. They pluck the leaves and feed and tend the worms until the cocoons are formed; so that you perceive the culture of silk detracts nothing from agriculture.

The greatest embarrassment hitherto has been the extracting or reeling the silk from the cocoons. The reels of France and Italy, and indeed of all parts of the world, receive the thread, which consists of the fibres of several cocoons. according to the requirement of the fabric to be made, in skeins, which must be spooled before it can be twisted. Two of our countrymen, Messrs. Gay and Mosely, have invented a reel which receives the thread on spools and thus the labor and wastage of the old process is avoided. Mr. Gay assures me that an ingenious woman can be taught, in a short time, to reel, on his reel, with great perfection. A great advantage of reeling on to spools consists in its safe easy carriage any distance without injury. We have, therefore, surmounted the most difficult process in the whole operation.

These gentlemen have also employed the several machines in use in France and England in the manufacture, so that it will require but a comparatively small capital to establish manufactories of silk in the country.

When we consider how admirably adapted to silk are our County Poor house establishments: how the wants of the poor may be mitigated by inducing them also to enter on the culture, by obtaining leaves of the mulberry from their rich neighbors; how the middle classes of society may improve their condition by entering on the culture of silk; I feel, I confess, a strong desire to be able to persuade people to lose no time in laying the foundation of their culture by immediately setting about it in earnest, and not to let any thing hinder them from sowing the mulberry in the manner indicated, this spring.

The *morus alba*, or white mulberry, I am satisfied is the most proper for making the best silk; the purple mulberry, which is indigenous to some parts of our country, although it will make silk, yet it is not of as good a quality. The *morus multicaulis*, or Chinese mulberry, has recently been introduced into this country, but it

is apprehended that it will not withstand our rigorous winters; and as the common white mulberry will withstand them and make excellent silk, I should not recommend the propagation of the Chinese.

I forbear saying any thing on the mode of rearing the worm. I am satisfied that it does not require the care and pains to rear it in this country, which the precepts of Count Dandolo would imply. In due time instructions will be given level to every capacity. May I not count on your co-operation in this most important object.

With sincere respect, A. SPENCER.

☞We invite the attention of our agricultural friends to the following article from the Southern Agriculturist. The subject of which it treats, is one of vast importance, not only to themselves, but to their country and to the whole race of man. Every valuable and useful improvement in agriculture is a benefit conferred on the whole family of man. Its direct and immediate effect on the private interest of him who discovers it, is an ample compensation for that very small and inconsiderable degree of trouble and expense, ordinarily required to be incurred, nay, in general, it will remunerate him more than a thousand fold;this consideration,if they would act rationally,could not fail to induce every intelligent Farmer,however selfish he might be, even though the welfare of every other human being but himself, should be to him a matter of perfect indifference, to incur the very inconsiderable trouble and expense of making every year, with care and accuracy, one or more of the ten thousand experiments by which agriculture may be improved. But how much stronger are the inducements to the benevolent and philanthropic man,who, in addition to the pecuniary profit which he would derive from a successful experiment, would experience a gratification incomparably greater,from the reflection that he had benefitted his country and his species,that he had not lived in vain, that whatever might be said of others, it could never with truth be said of him, that the world would, at least have sustained no loss, had he never made his appearance in it. But how can those, who believe in a future state of retribution, according to their works. and who hold it to be a clear and indispensable duty of every man, to do all the good he can. How we ask, can such men reconcile it to their consciences, blindly to trudge on in the old and beaten track, often irksome,expensive, laborious, and unprofitable, when they cannot but know, if they will reflect on the subject, that it is highly probable, nay almost certain, that by a very trifling degree of intelligent exertion,they have it in their power to confer benefits, perhaps of incalculable value on their fellow men? We hesitate not to assert, that in the present state of agriculture, there is not an intelligent farmer in the country, who by annually making one or more experiments which would cost him only a little thought and attention, a few hours labour,and perhaps a few cents expense,could not do more good to his country, and to mankind, than they will otherwise derive from the labors of his whole life. These considerations demand,and they are worthy the attention of every man, who feels that it would be a just cause of reproach to have lived in vain. Let it not however be forgotten, that in addition to the making of agricultural experiments, it is the duty of those who make them, to promulgate their results, in order that the community may profit by them. This can be done. The Editors of the many agricultural Journals in the United States, would with great pleasure, not only publish, but if required, draw up a detailed statement of any well authenticated experiments, the results of which, should promise to promote the success of the great cause, which it is their especial duty to advocate—the cause of AGRICULTURAL IMPROVEMENT. For ourselves, we not only promise to communicate them to our readers, but we entreat the friends of agriculture to furnish us with the results of their experiments. Supposing the annual contribution of each to the stock of existing agricultural knowledge to be small, yet what would be the aggregate amount contributed by 100, 50 or even 10 intelligent farmers in the course of a few years? It would be sufficient to change entirely the existing aspect of the country—to substitute fertility for barrenness—beauty for deformity—prosperity for embarrassment, and what is still of infinitely greater importance, by furnishing to the people the means, it would give rise to systems of Internal Improvement, and of Universal Education, through the operation of which, intelligence would be substituted for ignorance, and virtue for vice. The perpetuation of liberty would be secured, and thus, great and desirable as would be its direct and immediate effects, they would sink into insignificance, when compared with the more remote and consequential benefits which it would confer. What lover of his species can contemplate results so glorious, so pregnant with unmixed good, without being fired with a noble ambition to contribute his mite to their production? Exert then your intellectual powers to devise plans of agricultural improvement, test those plans, or such as may be devised by others, by full, fair and careful experiments.—Communicate the results to the public and enjoy the high gratification of knowing, that you

have been the benefactors of your country and of mankind. ED. TEN. FARMER.

On the facility of making experiments and exactness necessary to render them profitable.

To the Editor of the Southern Agriculturist.

I have already made some remarks on the just apportionment of crops, and of labour on plantations, and have endeavoured to point out the errors and the remedy; whether I have succeeded or not is for those to whom these remarks were addressed to determine. The next subject I shall call the attention of our planters to, is the *want of proper attention to, and exactness in making experiments.* There are few of the intelligent portion of our agriculturists who have it not in their power annually to make several experiments, without interfering with the regular crops in such a manner as to be worthy of notice, and by many, such experiments are made, but owing to a want of proper attention to them and exactness in making and ascertaining the result, they prove of no avail.

That experiments can be made on a portion of a crop, without materially affecting the product of the whole can admit of no doubt. To make myself better understood, I will suppose that a planter wishes to ascertain *whether the cutting off of the tops of his corn lessens the product.* Let him select a quarter of an acre, or even an eighth, and let him divide this into as many portions as he desires to make trials; the first portion to be cut when the silk has dried, another portion when the ear appears fuller and turning yellow, &c. &c. These he can compare with portions of the like size left for that purpose untouched, or with some part of the main crop growing in the neighborhood.

Again should he wish to try the effect of a particular manure, or of several, or the application of them in different modes, how easy is it for him to select a spot in any part of his field; the only thing to be attended to, will be that all of that part experimented upon is of the same quality, and is situated alike as to moisture or dryness. The culture should be the same as that bestowed on the rest of the crop. and thus a fair experiment might be made with a very trifling additional trouble, and the total product of the crop not materially affected by either the success or failure of the experiment; whilst at the same time, much valuable information would be gained.

Again, should a planter wish to gain information relative to the *potato* crop, (and there are many points of practice which it is highly desirable to determine,) let him select contiguous rows on which to make his experiment. Thus, in one year, a planter has it in his power, to make, at least a dozen experiments, without putting himself to much inconvenience, and these experiments could be repeated every year until the result was fully established, for it must be borne in mind, that one experiment does not establish any thing—the time of planting—the season, or even the quality of the soil, may vary the result. It is not, until after several experiments have fully satisfied him of the result, that a planter should vary his ordinary practice, in order to conform to what his experiments have proved to be better.

But, there are numbers of planters, who make annually, such experiments as I have detailed above, who are no wiser at the termination than they were at the commencement; nay further, are sometimes misled by them; and this will ever be the case as long as they are conducted in the *helter skelter* manner in which but too often they are. What possible good can any one expect to derive from an experiment, unless he is exact in making it, and recording all the particulars relative to it. But, unfortunately, few attend to this, and if you inquire of them the result, you will discover very often, that they have but a very indefinite idea about the whole matter, and have not satisfied themselves whether it ought to be adopted or rejected; and on the whole, think it best to stick to the old plan, as they have done tolerably well hitherto. Now, if it be worth while making an experiment at all, it is certainly worth making it as it should be, or there is actually a loss incurred; inasmuch as some little additional trouble must be taken, and there is the many visits which are made to it, and the perplexity it occasions in consequence of nothing satisfactory being ascertained. Now, it is quite easy for planter to avoid all this, and to get well paid for his labour. Let him keep a small memorandum book in his pocket, in which let him note every thing which is done, and the appearance of the different parcels, when compared with each other and the general crop: let him also note his opinions at the moment, which he can afterwards correct, should he find that he was in error, this noting down the impressions of the moment, is of more importance than most planters attach to it. Let him, moreover, be very particular in detailing the work done, the time when and the manner it was done: and, at the conclusion, let him be extremely careful and exact in ascertaining the result. Let him not, as unfortunately is but too often the case, be satisfied with the apparent result; if he does, he will be often deceived; and what is more, he will deserve it. On the contrary, let him either measure or weigh (the latter is decidedly to be preferred) the product of every experiment, and always an equal quantity of the main crop, in order that they may be compared. In a small experiment the difference of a few pounds, nay, even ounces will make a material difference in the product of a field; yet this would not be perceptible to the

eye, and in deciding in that way, what errors may be committed. Is it not the height of folly to act thus, and yet many of our planters make no other experiment, and live and die, without profiting either themselves of their neighbours, by any improvement. This, as we all know, will not be owing to the state of perfection to which agriculture is at present brought, for I believe it is more defective and more has yet to be ascertained, relative to it, than any other science.

I am, &c

A RETIRED PLANTER.

SHEEP HUSBANDRY.

☞We invite the attention of our readers, especially in Western Virginia and the Eastern part of Tennessee to the following article on Sheep Husbandry. Although it be true, that the more northern the climate, the finer and heavier the fleeces, yet it is believed, that there are few portions of the Globe better adapted to the profitable rearing of sheep, than the sections we have mentioned. The vast bodies of rich mountainous land with which they abound, partaking in a great degree of all the advantages for this purpose of more Northern regions, combined with the superior advantages of the milder temperature and more productive quality of the valleys, render it certain, that, at no very distant period wool, & mutton will become articles of export, to an immense amount, especially when we consider the great extent of the market furnished by Virginia, the Carolinas, Georgia and Alabama for the consumption of mutton—If we look forward to the time, and it is not far distant, when Tennessee and Western Virginia shall be permitted to share in the vast and incalculable benefits of Internal improvements, it does not require the spirit of prophecy to foretell, that these regions will become amongst the most flourishing manufacturing and agricultural districts of the Union, and amongst the manufactures which must ensure their ultimate prosperity, those of wool and iron will probably be the most prominent. We have little doubt that persons now living will see those immense bodies of mountain land, now considered of little or no value, covered with flocks of sheep; the wool of which, together with the iron and other minerals extracted from their bowels, will yield an annual income, especially after being manufactured, superior in amount to the value of all the agricultural products of the vallies, even when, by an improved system of agriculture, those products shall have been doubled, trebled, and even quadrupled in quantity & when, too, by the establishment of manufactures, and the acilites for transportation furnished by rail roads and other internal improvements, greatly increased in value. It is high time that the value of Sheep husbandry in these sections of the country should be fairly tested by experiment. This could easily be done by a company, with a comparatively small capital, the shares of which need not exceed $5—and if judiciously and prudently managed, we are convinced it could soon be made to afford an annual dividend at least of 50 per cent on the capital employed. We earnestly solicit the attention of the enterprising farmers of Eastern Tennessee and Western Virginina to the above suggestion. It is certain that the experiment can be fairly tried almost without the possibility of loss, and with the fairest probability of immense profit to those engaged in it, and with incalculable advantage to their country.

ED. TEN. FARMER

We take the following observations on Sheep Husbandry from Silliman's Journal, 1834. It is contained in a "Notice of an excursion among the White Mountains of New Hampshire &c. with miscellaneous remarks by James Pierce.

"From their elevation and latitude, the grazing lands situated in the Northern part of New England, are best adapted for Sheep.—The great consumption of fodder incident to long winters, so objectionable to the raising of cattle, is more than compensated to the merino sheep proprietor, by an improvement in the quality and quantity of wool, which is much affected by climate. In tropical countries sheep are *dressed* with hair—in more temperate, the wool is generally short and coarse, but longer and finer in cold regions.—In Spain two and a half pounds of wool is the average product of their merinos, and of a quality inferior to ours—in the middle States, and valley of the Hudson, the same; on the elevated ground in the western part of Connecticut and Massachusetts—three, and in some flocks, four lbs. In the southern and middle part of Vermont from four to four and a half. In Maine the average is five; and in a few choice flocks, six pounds the sheep. The best Merino wool of Europe is from the bleak mountains of Saxony. The quantity and quality of the wool is also considerably affected by the food, management, and selection of flocks, as nature bountifully provides a dress for all animals according to their wants. Furs are found to be good, and the staple long, in proportion to the coldness of climate.

"The northern parts of the United States and Canada, in addition to climate, have for the raising of wool, an important advantage over England, and the south of Europe, in cheapness of soil—much land being required for the support of sheep. The fee simple of goo

sheep farms in America, can be procured with the amount of the annual taxes of the same quality of ground in England."

☞To the following queries we shall reply in our next, which will be in due time for the operations mentioned—While we shall always take pleasure in communicating all the information in our possession on any agricultural subject—we must again remind our agricultural friends every where, that by furnishing to us answers to any queries which may be propounded in the FARMER, they will not only increase the value of the paper—materially contribute to the agricultural improvement and the consequent prosperity of their country, but mutually benefit each other to an extent of which they are perhaps little aware. It is not only by the promulgation of new discoveries in agriculture, but by the general dissemination of the knowledge already acquired, that agricultural papers have so largely contributed to the prosperity of those sections of country in which they have been encouraged and widely & generally circulated. No farmer knows every thing already discovered, the knowledge of which would be useful to him, by contributing to the information of others; he would entitle himself to their aid in return, and by such mutual acts of liberality and kindness, all would mutually profit, the general diffusion of existing knowledge be effected, and a great and most important improvement of agriculture produced. Are not these considerations amply sufficient to induce all who have it in their power, to incur the very trivial labor of contributing their mites to the aid of their brethren and the welfare of their country? We hope to receive many answers to the following queries in time for our next.

To the Editor of the Tennessee Farmer:

My object in writing is to remind you, that you promised in one of your former numbers to give us timely notice of the proper way of securing and gathering the second crop of clover intended for seed, and the best plan of getting out and saving the seed.

When the seed is not intended for sale, but for sowing, will not it do as well in the chaff as if cleaned?

What is the proper time to turn under the second crop for putting in wheat?

After the clover is turned under, is it proper to harrow the ground, and sow wheat above the clover lay, or let it lie long enough to decompose, and then stir it again before sowing?

When briars and sedge grass have had possession, will one crop of corn, well worked, put the land in a proper condition for a wheat crop in the fall, or an oats crop the ensuing spring?

By answering the above enquiries in your next number you will oblige a

SUBSCRIBER.

Knoxville, June 4, 1835.

RECEITS.

RECEIT TO MAKE BLACKBERRY WINE.

Press the juice out lightly through a cloth, so as not to permit much of the pulp to pass through. To every quart of the juice, add two quarts of water, and three pounds of clean brown sugar. Put the mixture in a jug or keg, which must be filled with it. Let it stand with a thin cloth over the mouth or bung of the vessel, until the fermentation has ceased, which may be known by putting the ear to the aperture. if the whizzing noise has ceased the fermentation is completed. Draw it off immediately, leaving all the sediment at the bottom—throw it out, wash the vessel, and strain the liquor into it through a clean cloth, and stop it up tight. No spirit must be put in it. It will be fit for use in three or four months, but the older it is the better it will be. Good currant wine may be made in the same way.

Cure for Gapes in Chickens.—To one quart of corn meal add about one spoonful of sulphur and as much salt as will give the dough a salt taste—make it into dough. We are assured by a respectable farmer who has repeatedly tried it, that if this food be given to young chickens frequently, say once a week, until the season for gapes is past they will not take the disease, and that if laboring under it, three or four meals of it in succession will cure them

Washington Republican.

TO PRESERVE MILK.—In very warm weather, when milk sours soon, put two table spoonfuls of salt into every pail of milk before straining, and it will greatly improve the quality and quantity of butter.

TO PURIFY MOLASSES.—8 lbs. molasses; 8 lbs water; 1 lb. coarsely pounded charcoal. Boil them together 20 minutes, strain through fine flannel double. Boil again gently with the white of an egg, till it forms a syrup of proper consistence, then strain it again. Prepared in this manner, molasses will be nearly as good as sugar.

TO RESTORE TAINTED MEAT OR FISH.—Put a few pieces of charcoal into the pot in which it is to be boiled.

TO WASH CALLICO WITHOUT FADING.—Put a

table spoonful of common salt into the suds, and the colors will remain bright.

A perfect preventive of dry rot is said to have been discovered by a Mr. Kyan, of London. Its efficacy is attested by various professors, architects, and ship builders, and it has been adopted by the Lords of the Admiralty, the Commissioners of Woods and Forests, and the directors of the great public buildings now in progress in London.

Observations on the action of Plaster Paris or Gypsum on Vegetables.

[Extract from the Ohio Farmer.]

"Gypsum by its sceptic qualities, causes a fermentation in the soil, and decomposes certain substances that may be in it, and that it causes a gas or vapour to arise which is the food of plants, and that by some chemical power that emanates from the action of Gypsum causes the plants to perspire, for there will be large drops of water on cabbages, and moistures on other plants, when there is no dew." The writer says that he made an experiment by strewing plaster over cabbage and other vegetables on one side of the garden, leaving the other part of the garden without any; the result was that the cabbages and other vegetation on the side which was strewed with plaster had large drops of water on the leaves every morning, while those of the other had not a drop. There had been no rain for about three weeks and the weather uncommonly dry, no dew was to be seen in the mornings. *I* attended to the garden for several days and from appearances I am convinced that instead of attracting moisture, the Gypsum causes a perspiration in the plant. I suppose that the sulphur in the plaster, by some chemical operation in the earth, acts upon the plant or vegetable so as to cause it to perspire and preserve it in health, and which causes it to grow."

From the National Intelligencer.

THE WHEAT CROP.

The farmers of Virginia, never within the recollection of the oldest inhabitant, had so gloomy a prospect for a crop as at the present time. From the commencement of Spring, they have hoped against hope, that some change in the weather might revive the perishing remains of our crops. But the question is now settled. Fields which in ordinary seasons would bring twenty bushels to the acre, are ploughed up, and put in Indian corn or oats; and many of the most skilful and hitherto successful farmers are willing to compromise for their seed. A few, a very few, who are peculiarly favored, will do a little bettter; but there is now little doubt that a very large portion of the grain-growing part of Virginia will not upon an average, produce the seed which has been sown. In the most productive part of this county, two dollars a bushel have been offered and refused for seed wheat. In this disastrous condition of the farming interest, we are turning our faces to the South. The high price of cotton, and the large profits and successful speculations which have been made by those who have recently adventured to that favored region, have produced a sort of mania for emigration, to leave desolate, not only the inferior lands but the rich and healthy mountain region also. The general cry is, "We cannot make wheat. If it escape the winter it is devoured by the fly. What else can we devote our lands to?" The ready answer is, "Go to the South; carry your slaves to the South; make cotton and get rich."

Such a flood of emigration as this Fall will bring forth, has never yet been witnessed in the Old Dominion.

Fauquier, May 25, 1835.

Useful Discovery in the Preparation of Hemp.—Many unsuccessful experiments have been made to discover a means of extracting the glutinous matter from hemp, and thus reduce it to a fine fibre, and make it fit for the same purposes as flax. A machine has, however, been invented which accomplishes this desirable end, by Mr. Shanks, a flax spinner, residing in Arbroath, N.B. It consists of two metal plates, of peculiar construction, supportedby springs, to moderate the compressure. In passing between these plates, by their friction, it becomes perfectly free from the glutinous matter, and leaves the machine with a soft and delicate fibre.—When thus prepared and hackled, it is equal to the finest flax, and may be spun and applied to the same purpose as that commodity. The expense attending the process is very small; the machine is worked by steam power, which may be borrowed from any other machine where there is steam.

IMPORTANT TO GARDENERS.

On every square rod planted with cucumbers, put a piece of a board flat on the ground, to preserve your plants from a striped bug, which some seasons is very destructive. This simple experiment may seem to be novel and ineffectual; but the secret of the matter is, the board forms a shelter for a toad, which hops from under the cover at night and destroys the bugs, and during the day time may be found by turning over the board. Should any one have doubts on the subject, he can easily try the experiment.

He that won't work shan't eat, say religion and reason.

WHAT A FARMER WANTS.

The farmer wants a stable mind,
A purpose sure and steady,
To patient industry inclined—
For business always ready.

Good careful habits well infixed,
And judgment acting clearly,
To sift out truths with error mixed,
Though it should cost him dearly.

He wants a neat and prudent wife,
Who when he earns can save it,
Who kindly soothes the cares of life,
(Best gift of him who gave it.)

He wants a snug and tidy Farm,
And health and strength together,
A house and barn to keep all warm
In cold or rainy weather.

Heaven's blessing then must crown the whole,
Or all his hopes are blasted,
But with *this* resting on his soul,
The purest joys are tasted.

He then enjoys a bliss unknown
To those the world calls greatest;
Known only to the good alone,
The earliest and the latest.

THE PLEASURES OF VIRTUE.

If it be a proof of benevolence in God, that our external organs should have been so framed, as to have a liking for wholesome food, it is no less the proof of a benevolent and righteous God, so to have framed our mental economy, as that rigid and wholesome morality should be palatable to the inner man. Virtue is not only seen to be right, it is felt to be delicious. There is happiness in the very wish to make others happy.—There is a hearts, ease or a hearts enjoyment, even in the first purposes of kindness, as well as subsequent performances. There is a certain rejoicing sense of clearness in the consistency, the exactitude of justice and truth. There is a triumphant elevation of spirit in magnanimity and honor. In perfect harmony with this, there is a placid feeling of sincerity and blissful contentment in gentleness and humility. There is a noble satisfaction in those victories, which, at the bidding of principle, or by the power of self command, may have been achieved over the propensities of animal nature. There is an elate independence of soul, in the consciousness of having nothing to be ashamed of. In a word, by the constitution of our nature, each virtue has its appropriate charm; and virtue on the whole, is a fund of varied as well as perpetual enjoyment to him who hath imbibed its spirit, and is under the guidance of its principles. He feels all to be health and harmony within; and he seems to breathe as if in an atmosphere of beauteous transparency, proving how much the nature of man & the nature of virtue are in unison with each other.—It is hunger which urges to the use of food; but it strikingly demonstrates the care and benevolence of God, so to have framed the organ of taste, that there shall be superadded enjoyment to the use of it. It is conscience which urges to the practice of virtue; but it serves to enhance the proof of a moral purpose, and, therefore, of a moral character of God, so to have framed our mental economy, that in addition to the felt obligations of his righteousness, virtue should of itself be so re-galing to the taste of the inner man.

LIFE.

"The important lesson of life" says a fine writer, "is the government of our passions." Few I believe will deny this assertion, and yet how few appear the least solicitous to acquire so great and necessary a lesson, notwithstanding they are certain that the neglecting it must one day, on a retrospect of their past life, be productive of distress, which no pen can sufficiently describe?

But is there no path we may tread during the sportive days of blooming youth, that will enable us to bear with fortitude every evil we may be exposed to in our journey through life, support us with composure under the separating stroke of death; and fit us for an acquittal at the grand tribunal hereafter? Doubtless there is—follow the dictates of reason and the christian religion, which forcibly command us to keep our passions in subjection, and practice, without ostentation, the great virtues of piety, benevolence, and justice. If we perform these duties we shall soon experience a serenity of mind which vice never can give it; it will be a satisfaction unalloyed by remorse; and will qualify us to bear every affliction with a cheerful resignation, and prove an "unerring road to everlasting peace."

CLERICUS.

Wearing Flannels.—As the genial sunshine of Spring advances, those accustomed to wearing flannel under garments are too much disposed to lay them suddenly aside. This is an error of great magnitude. Keep them on till the flowers are blooming in the fields, and a uniform atmospheric temperature established A multitude annually, are hurried to an early grave, in the very meridian of life, in consequence of not understanding, or by neglecting this simple though important advice.

Med. Jour.

Top Onions.—One of the most profitable crops to which a farmer can appropriate a portion of his grounds is top onions. Independent of the value of the bulb, or full grown onions, the

top onions will command from two to three and a half dollars per bushel.—*N. Y. Farmer.*

A SHORT SERMON.—SELECTED.

How to make money.—Do you complain that you have nothing to begin with? "Tom" you say, "has a farm, and Harry has one thousand dollars, but I have nothing." I say to you to look at your hands, and tell me what they are worth. Would you take one thousand dollars for them, or for the *use* of them throughout your life? If you can make half a dollar a day with them it would not be a bad bargain, for that sum is the interest of more than two thousand dollars; so that if you are industrious and Harry is lazy, you are more than twice as rich as he is; and when you can do man's work and make a dollar a day, you are four times as rich, and are fairly worth four thousand dollars. Money and land, therefore, is not the only capital with which a young man can begin the world. If he has good health and is industrious, even the poorest boy in our country has something to trade upon; and if he be besides educated, and have skill in any kind of work and add to this, moral habits and religious principles, so that his employers may trust him and place confidence in him, he may then be said to set out in life with a handsome capital, and certainly has as good a chance of becoming independent and respectable, and perhaps *rich*, as any man in the country. "Every man is the maker of his own fortune." All depends upon setting out upon the right principles, and they are these:—

1. BE INDUSTRIOUS—
Time and skill are your capital.
2. BE SAVING.
Whatever it be, live within your income.
3. BE PRUDENT.
Buy not what you can do without.
4. BE RESOLUTE.
Let your economy be always of to-day, not to-morrow.
5. BE CONTENTED AND THANKFUL.
A cheerful spirit makes labor light, and sleep sweet, and all around *happy*, all which is much better than being *only rich.*

In Rhode Island there are in operation 120 cotton mills, containing about 235,000 spindles and 6,000 looms. The capital directly invested is about $6,500,000. They use 11,000,000 pounds of cotton, and turn out 39,000,000 yards of cloth annually. There are directly employed in manufacturing 6,000 females, and 3,000 males, and upwards of three thousand of that number are under twelve years of age. The weekly wages for females average $2 25; for males including boys, $5 25. Whole amount of wages paid to dependents of the manufactories, about $50,000 weekly, or $2,6000,000 per annum.—The machine shops, bleaching, callendering, printing and other establishments amount to an addition of about one-fourth. There is used for sizing, &c. about 2,000 barrels of flour, 2,000 tons of coal, 2,000 cords of wood, 80,000 gallons of oil, and about $100,000 per annum in other articles, all for the manufactories only. The increased business and consumption for the manufacturing population is not estimated.

Honesty.—At the exhibition of the pupils attached to the New York Institution for the instruction of the Deaf and Dumb Children, a bright little fellow was asked, "Why do you come here?" To which he replied, by writing on his slate, with an arch smile, "In my opinion, *we have come here to make a show, and get praise.*"

Notices of the Tennessee Farmer.

From the Nashville Union.

The Tennessee Farmer.—We have received the 5th N° of an Agricultural Newspaper of the foregoing title, published in Monthly numbers of sixteen pages each, in royal octavo form, printed in double columns on good paper, and edited and published by the *Hon. Thomas Emmerson*, at Jonesborough East Tennessee.

We have heretofore been familiar with the Baltimore American Farmer, the Southern Agriculturist, and Gennessee Farmer, and feel free to say, after a careful examination of the number of Judge Emmerson's Monthly now on our table, that it is in every respect for the use of farmers and planters in this State and latitude, equal, if not superior, to either of the works named. It is published at the cheap price of one dollar per annum; but apart from every consideration of expense, we would recommend the work to the attention and patronage of every practical farmer in the Western Country.

The fifth N° of the "Tennessee Farmer has been received. In point of interest and valuable information, it fully equals the preceding ones. We would again seriously urge upon the farmers of Madison, and of the District generally, the importance of sustaining by their patronage this effort to elevate and improve their system of agriculture. It is the only paper devoted exclusively to the subject of farming in the State—the price is a mere trifle to the planter, ($1 per annum)—and is ably and judiciously conducted by an old theoretical and practical farmer. Try it, if only for one year,

JOHN H. RAWLINGS, Esq. and the editor of the Truth Teller have been appointed agents in this place. *Truth Teller.*

NOTICE TO THE PUBLIC.

All the surplus copies of the first number, having been exhausted, the editor will shortly cause it to be re-printed, and will forward a copy to each existing subscriber. As it is important to him to ascertain, with as much precision as possible, the number of copies which it will be advisable to reprint, he requests all persons desirous of encouraging the work to forward their names at as early a period as practicable,—otherwise it may be out of his power to furnish complete sets to future subscribers.

AN ESSAY ON CALCAREOUS MANURES.

The able, enlightened, and public spirited editor of the Farmers Register, Edmund Ruffin Esq. The author of this excellent and valuable treatise, has forwarded to us a copy of the second and a highly improved and enlarged edition of this valuable work,one which should be in the hands of every intelligent farmer in the country. From the advertisement prefixed to this edition, which we publish in this number, our readers, will be able to form an idea of the nature and object of the work, a work, which while it demonstrates, that the author occupies a high rank amongst scientific and practical agriculturalists, at the same time entitles him to the honorable appellation of the benefactor of his country. We do hope, that the citizens of Tennessee will be amongst the foremost to encourage this effort for the general dissemination of agricultural knowledge & thereby stimulate, not only the enlightened and patriotic author of the essay, but all others, who may be qualified, to further efforts for the improvement of the noble science of agriculture. We have no hesitation in pronouncing this essay to be to an American Farmer, by far the most valuable work on the subject of calcareous manures, ever heretofore published, either in Europe or America. The work will be highly useful to farmers in every part of the State, but we think peculiarly so to those in the Western District.

JUST PUBLISHED,

THE

SECOND EDITION OF THE ESSAY

ON

CALCAREOUS MANURES,

IN THE CHEAP FORM OF A SUPPLEMENT TO THE FARMERS REGISTER.

THIS edition (having been still more increased in size since the former advertisement, though without any addition to the prices then named) contains nearly twice as much print as the first, and yet will be sold at but little more than half the price. The new matter consists principally of more full explanations—additional and new proofs—and more full and minute directions for practical operations, designed especially for the use of those who are beginning to apply marl, and have every thing on the subject to learn.

TERMS.—The second edition of the Essay on Calcareous Manures, is printed on 116 of the large and closely lettered pages of the Farmers' Register—(equal to more than 450 pages of the former duodecimo edition, and will be furnished neatly covered, in pamphlet form, at the following rates:

For $5,8 copies on good paper,or 10 on inferior
$10, 18 " " 22 "
$20, 40 " " 50 "
$50,110 " " 140 "

No smaller number of copies than $5 worth will be sold by the publisher. Single copies at 75 cents, may be obtained at the bookstore of J. W. Campbell, Petersburg; Va. and of Gideon B. Smith, office of the Turf Register. Baltimore.

The packages will be sent by mail, and all losses by mail, whether of orders containing money, or of copies, will be borne, and made good, by the publisher, upon his being certified of the money having been properly committed to the mail, at what time,or of copies not having arrived at the proper post offices. The postage will be paid by the publisher. when desired for which he will deduct only half its amount, from the package of copies sent. Any other convenient mode of transmission preferred by booksellers and other large purchasers, will be made use of, but not at the risk of the publisher.

Payment in advance, and in current money, required in every case. Early orders from clubs of individuals, and from booksellers are requested to be addressed to Edmund Ruffin, P. M. Shellbanks, Prince George County, Va.

ADVERTISEMENT

TO SECOND EDITION.

WHEN the first edition of the Essay was published, it met with a reception far more favorable, and a demand from purchasers much greater, than the author's anticipations had reached; and it is merely in accordance with the concurrent testimony of the many agriculturalists who have since expressed and published opinions on the subject, to say that the publication has already had great and valuable effects,in directing attention, and inducing successful efforts, to the improvement of land by calcareous manures. Experimental knowledge on this head has probably been more than

double within the last two years; and the narrow limits of the region within which marling had previously been confined, have been enlarged to perhaps tenfold their former extent.—Still, the circumstances now existing, however changed for the better, present a mere beginning of the immense and valuable improvements of soil, and increase of profits, that must hereafter grow out of the use of calcareous manures, *if their operation is properly understood by those who apply them.* But if used without that knowledge, their great value will certainly not be found; and indeed, they will often cause more loss than profit. It is therefore not so important to the farmers of our country at large to be convinced of the general and great value of calcareous manures—and to those in the great Atlantic tide-water region to know the newly established truth, that their beds of fossil shells furnish the best and cheapest of manures—as it is, that all should know in what manner, and by what general laws, these manures operate—how they produce benefit, and when they may be either worthless or injurious. And this more important end, the author regrets to believe, has as yet scarcely been even partially attained, by the dissemination and proper understanding of correct views of the subject. Of course it is not to be supposed that this Essay has been read, (if even heard of,) by one in ten of the many who have been prompted by verbal information, to attempt the practice it recommends; and of those who have read, and who have even expressed warm approbation of the work, it has seldom been found that their praise, was discriminating, or founded upon a thorough examination of its reasoning and theoretical views, on which, whatever value it may possess, principally rests. For all persons who are so easily convinced, it may be truly said, that the volume embraced nothing more, and was worth no more, than would be found in these few words—"the application of calcareous manures will be found highly improving and profitable." It is not therefore at all strange, that the attentive reading of a volume to obtain this truth, was generally deemed unnecessary.

Though the first edition of the work has been nearly exhausted, the circulation has as yet been almost confined to a small portion of only the State of Virginia, in which the mode of improvement recommended had previously been successfully commenced, or had at least attracted much attention. But this district is not better fitted to be thus improved than the remainder of the great tide-water region, stretching from Long Island to Mobile—and to a great part of which, calcareous manures may be cheaply applied. It is only in parts of Maryland and Virginia that many extensive and highly profitable applications of fossil shells, or marl, have been made: in North Carolina the value of the manure has been but lately tried—in South Carolina and Georgia, no notice of it has been yet taken, or at least has not been made known—and in Florida and Alabama, (parts of which are peculiarly suited to receive the benefits,) it is most erroneously thought that such improvements are only profitable for old settled and impoverished countries. The farmers of Pennsylvania have gone far ahead of those in Virginia in manuring with lime—and it is believed (but upon no certain testimony) that in N. Jersey, use has been made of the calcareous manure which in Virgina is called marl, as well as of the *green sand* which they even still more erroneously call by the same name. But whatever may have been the extent of their use of calcareous manures of every kind and however great their success, it is believed that our northern brethren have been as little directed by correct views of the operation of these manures, as those of the south, who have neglected them entirely.

But though the circulation of this work will be most useful throughout the great tide-water region, which is so generally supplied with underlying beds of fossil shells, and so much of the soil of which especially needs such manure—still the assertion may be ventured, that there is no part of the country, where the views presented, *if true*, are not important to be known—and if known, would not be highly useful to aid the improvement of soils. It is to the general theory of the constitution of fertile and barren soils, that the attention and severe scrutiny of both scientific and practical agriculturists are invited—and to the several minor points there presented, which are either altogether new, or not established by authority: such as the doctrine of acidity in soils—of the incapacity of poor and acid soils to be enriched—and of the entire absence of carbonate of lime in most of the soils of this country.

The circumstances stated above, have induced the publication of a second edition as a supplement to the Farmers Register, (and suited to be bound with either volume of that work,) which, in that form, may have the facility of distribution thro'the mail—&which may be offered at so low a price as to reach, as nearly as possible, that general circulation which is its author's main object.

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